



DSI References

Owner C&T Reinforcing, Calgary, Canada +++ **General Contractor** Clark Builders, Calgary, Canada +++ **Architects** HCI Architecture, Calgary, Canada +++ **Consulting Engineers** RJC Calgary, Calgary, Canada

DSI Unit DSI Canada Ltd., Western Division, Surrey, Canada

DSI Scope Supply of size 6x0,6" and 7x0,6" DYWIDAG Multistrand Post-Tensioning Systems and Monostrand Post-Tensioning Systems; rental of equipment; installation supervision



Lightweight structures with DSI: Premiere for Post-Tensioning Systems in Calgary

Genco Place is a 14 storey building located in the south of Calgary. This structure originally began construction during the boom of the early 1980's. Construction was halted due to financial reasons after only completing the parking garage and a ground level structure. However, the current building owners recently decided to complete the building because office vacancies were getting increasingly scarce in Calgary.

An extensive design analysis of the existing structure and existing design drawings was undertaken and it was concluded that the existing foundations could support the new building. However, post-tensioning would be essential in order to minimize the overall building weight.

The consulting engineers selected a reinforcing system with post-tensioned beams and slabs. The beams use size 6x06" and 7x0.6" DYWIDAG Multistrand Bonded Tendons. It was critical to post-tension the slabs in addition to the beams to keep the structure weight within the limits the design engineer set. The slabs were reinforced using Bonded Monostrand Tendons. This system is new to the Calgary area and as a result received much attention.

All of the strands were protected with oil so grouting could be delayed until the warmer summer months. As a precaution, some of the strands in the first slab were investigated to confirm corrosion was not taking place within the length of the tendon. Thanks to the high quality materials used, there was no trace of rust or corrosion whatsoever.

DSI provided a full time supervisor during the installation of all post-tensioning systems. Qualified DSI employees ensured the quality of materials used, schedule timely deliveries and proper procedures and trained the contractor's personnel in post-tensioning. The contractor was pleased with all aspects of the post-tensioning operations and has since awarded DSI several additional projects.

